

WHAT IS CLAIMED:

1. A method of imprint lithography that comprises:
depositing an imprinting material on a substrate;
varying release properties associated with an imprint template by contacting a solution including imprinting materials and a polymeric fluorinated surfactant; and
energizing the imprinting materials to cause a solid material to be produced therefrom.
2. The method as recited in claim 1 wherein said varying further include providing said solution with a mixture of said imprinting materials and 3M™ Novec™ Fluorosurfactant FC-4432.
3. The method of claim 1 which includes pre-treating the surface of the imprint template to be hydrophilic.
4. The method of claim 2 which includes further pre-treating the surface of the imprint template by applying a composition that includes the surfactant.
5. The method of claim 4 wherein the composition is a mixture of isopropyl alcohol and the surfactant.

6. A method of imprint lithography that comprises:
depositing an imprinting material on a substrate;
moving an imprint template towards the substrate so
that the imprinting materials coats a surface of the
imprint template and a surface of the substrate; and
energizing the imprinting material to cause a solid
material to be produced therefrom; and
wherein the imprinting material includes a surfactant
having a composition that includes 87% polymeric
fluorochemical actives, 7% non-fluorochemical actives, 5%
1-methyl-2-pyrudiinone, and <1% toluene.

7. The method of claim 1 wherein the imprinting
material includes acryloxymethylpentamethyldisiloxane,
isobornyl acrylate, ethylene glycol diacrylate, and
2-hydroxy-2-methyl-1-phenyl-propan-1-one.

8. The method of claim 6 wherein the imprinting
material includes acryloxymethylpentamethyldisiloxane,
isobornyl acrylate, ethylene glycol diacrylate, and
2-hydroxy-2-methyl-1-phenyl-propan-1-one.

9. The method of claim 7 wherein the surfactant is
<1% of the imprinting material.

10. The method of claim 8 wherein the surfactant is
<1% of the imprinting material.

11. The method of claim 6 wherein depositing includes
depositing a plurality of droplets upon the substrate.

12. The method of claim 6 wherein depositing includes spin-coating.

13. The method of claim 6 which includes pre-treating the surface of the imprint template to be hydrophilic.

14. The method of claim 13 wherein pre-treating includes hydrolyzing.

15. The method of claim 14 wherein hydrolyzing includes forming -OH bonds at the surface of the imprint template.

16. A method of imprint lithography that comprises:
pre-treating a surface of an imprint template to cause it to be hydrophilic;

pre-treating the surface of the imprint template by applying a composition that includes 3M™ Novec™ Fluorosurfactant FC-4432;

depositing an imprinting material on a substrate;
moving an imprint template towards the substrate so that the imprinting materials coats the surface of the imprint template and a surface of the substrate; and
energizing the imprinting material to cause a solid material to be produced therefrom.

17. An imprinting material for use in imprint lithography that comprises a polymeric fluorinated surfactant.

18. The imprinting material of claim 17 wherein said polymeric fluorinated surfactant consists of 3M™ Novec™ Fluorosurfactant FC-4432.

19. The imprinting material of claim 17 which further includes a UV photoinitiator.

20. The imprinting material of claim 19 which further includes acryloxymethylpentamethyldisiloxane, isobornyl acrylate, ethylene glycol diacrylate, and 2-hydroxy-2-methyl-1-phenyl-propan-1-one.

21. The imprinting material of claim 18 wherein 3M™ Novec™ Fluorosurfactant FC-4432 comprises <1% of the material.